

QUALITY ASSURANCE EXCHANGE

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U.S. Department of Energy
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The 10th and final *Software Quality
Assurance Work Activity: Safety
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in the next edition of *QA Exchange*.

QA Quote of the Day

"Quality doesn't just happen."

-anonymous

I hope that you are finding the *QA Exchange* a welcome addition to your inbox. The Office of Quality Assurance Policy and Assistance (HS-23) is striving to make the content of this newsletter timely and full of useful information. Inside this issue of the *QA Exchange* we focus on the stimulus package and its effects on government work.

Director's Note

The American Recovery and Reinvestment Act (ARRA) is focusing on all government activities, but how will it impact the DOE QA community? Find out how the Office of Nuclear Safety, Quality Assurance and Environment (HS-20) is reacting to the change in *In the Spotlight*. In addition, there is an interesting article on software QA and its role in the successful commissioning of the National Ignition Facility in March 2009. Check it out in our *Special Feature*.

As in the past, many of the featured articles in this issue were written by our readership. We encourage all of you to submit QA related articles or topics of interest for consideration. After all, the *QA Exchange* is **your** forum for sharing ideas, operational experiences, and lessons learned.

Again, thank you to all of our readers for your submissions and feedback. Enjoy.

– Colette Broussard, *Director, Office of Quality Assurance Policy and Assistance* (HS-23)

IN THE SPOTLIGHT: OFFICE OF NUCLEAR SAFETY, QUALITY ASSURANCE AND ENVIRONMENT Interview with Andrew C. Lawrence, Director

The American Recovery and Reinvestment Act (ARRA) of 2009 (Public Law 111-5), also called stimulus package and referred to as the Recovery Act, is an economic stimulus package enacted by the 111th United States Congress and signed into law by President Barack Obama on February 17, 2009. The Recovery Act is intended to provide a stimulus to the U.S. economy in the wake of the economic downturn. The measures are nominally worth \$787 billion nationwide and include federal tax cuts, expansion of unemployment benefits and other social welfare provisions, and domestic spending in education, health care, and infrastructure, including the energy sector.

The Department of Energy has been authorized \$38.7 billion of funding opportunities under The Recovery Act. These monies will go toward new and/or accelerated programs such as developing alternative energy supplies, advancing innovative scientific research, decontamination and decommissioning excess nuclear facilities and disposing of radioactive waste, and Greening the Government.

Consequently, it is anticipated that there will be significantly more activities that will be ramping up as new projects are started or existing ones are accelerated. This has the potential to create the possibility for operational lapses resulting in inadequate attention to safety, quality, and the

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("In the Spotlight" ...continued from page 1)

environment in the planning and execution and oversight of work. This is further exacerbated particularly as the Department tries to do more work using the same limited number of qualified resources. Therefore, *QA Exchange* would like to bring awareness to and highlight the importance of even more vigilance regarding all factors that contribute to safety, quality, and the environment in all the work we do.

In this issue of *In the Spotlight*, we focus primarily on the specific activities of HS-20 that are directly related to ARRA. To help us better understand the impacts on the work scope of HS-20, we recently spoke with Andrew C. Lawrence, the Director of HS-20.

The mission of HS-20 is to promote nuclear safety, quality assurance, and environment, including the establishment and maintenance of policies, requirements and expectations for the Department, to ensure protection of workers, the public and the environment from the hazards associated with nuclear operations.

Q: Given your mission of Nuclear Safety, Quality Assurance and Environment, what do you see has the biggest impact to your program from the Stimulus package?

A: The Department will see a large number of activities ramping up to make timely use of the available funding. ARRA is injecting a significant amount of funding into Department programs with the expectation that these funds will be expended within a short time-frame. Agencies are also required to implement unprecedented levels of transparency and accountability, which will present challenges to even the most well managed programs.

My office has been assisting the Department by coordinating reviews of projects that might be funded by the ARRA. We have been specifically looking to see if there are any trends in work activities that may lead to inadequate safety, quality and/or impacts to the environment regarding the planning and execution of work.

ANDREW C. LAWRENCE BIOGRAPHY

Andrew C. Lawrence is the Director of the Office of Nuclear Safety, Quality Assurance and Environment (HS-20), within the Office of Health, Safety, and Security. In this position he is responsible for establishing nuclear safety, quality assurance and environmental protection requirements and expectations for the Department for quality assurance, for the protection of workers and the public from the hazards associated with nuclear operations, and for the protection of the environment from the hazards associated with all Department operations. He provides assistance to field elements in implementation of policy and resolving nuclear safety, quality assurance and environmental protection issues.

Q: What efforts is your office taking to prevent this from happening?

A: My office, in coordination with the Office of Procurement and Assistance Management, has developed a pair of Acquisition Letters that re-emphasize the importance of greening the government and safety in projects receiving ARRA Funding. These Acquisition Letters were issued on June 16, 2009.

Q: How else is HS-20 supporting "green" efforts through Recovery Act Projects?

A: We believe that DOE should affirmatively commit that it will take actions to "green" its projects as part of its implementation, and I am glad that the Department has reaffirmed this as policy in the new AL [Acquisition Letter].

Greening DOE projects not only helps to improve the energy and water efficiency of Departmental operations, it also serves to reduce worker exposures to hazardous substances and materials, reduce the volume and toxicity of waste, and help DOE demonstrate that it is creating "green" jobs and leading the transition to a greener economy.

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The greening actions being required involve analyzing supply chains and processing streams to identify opportunities to save energy and eliminate toxic substances.

Examples of steps that will help to green our ARRA Projects include:

- Incorporating sustainability into the design and conduct of new operations, including by building and maintaining energy efficient, environmentally sensitive buildings;
- Reducing or eliminating the acquisition, use and release of toxic and hazardous chemicals and materials;
- Maximizing the acquisition and use of energy efficient and environmentally preferable products in the conduct of operations;
- Increasing the energy efficiency and reducing the environmental impacts of electronic assets, including data centers; and
- Reducing degradation and depletion of environmental resources through post-consumer material recycling.

Q: How will the Department guarantee that environmental, energy, safety, and transportation aspects are covered by funded ARRA projects?

A: The responsibility falls to the Federal Contracting Officer. This Contracting Officer is required to consult with DOE environment and energy subject matter experts to assess the adequacy of the contractor's existing Integrated Safety Management System and Environmental Management System in light of any new performance requirements of the ARRA duties being assigned to the contractor. If the existing [management systems] are found adequate for the ARRA duties, the Contracting Officer will inform the contractor of this finding.

Q: What about when ARRA Funding vastly expands an existing contract's scope?

A: In instances where ARRA duties will significantly increase the contractor's environmental sustainability activities, or where there is work not anticipated under the existing contract scope, the Contracting Officer should instruct the contractor to supplement its existing Environmental Management System objectives and targets

and/or identify new significant aspects for the ARRA responsibilities. Information about the impact of the ARRA work on the existing Environmental Management System should be submitted as part of the contractor's proposal and forwarded to the Head of the Field Element for approval.

The Department also expects the Federal Contracting Officer to ensure all ARRA-funded projects at DOE sites provide safe and healthy working conditions for its workers, and that all work is conducted safely and in compliance with applicable regulations, including OSHA regulations and Department requirements for Safety and Health set forth in 10 CFR 835 and 10 CFR 851. The Contracting Officer should determine, based on consultation with safety experts, whether the ARRA funded work is covered by an appropriately robust and compliant safety program.

Newsletter Articles Needed

The *Quality Assurance Exchange* is intended to be a forum for the exchange of ideas and the sharing of experience among DOE field offices, contractors, and DOE headquarters to foster continuous improvement in QA implementation.

Readers are strongly encouraged to contribute articles on the implementation of QA requirements, lessons learned, and other QA-related topics. We welcome your feedback and suggestions.

Please forward your input to:

gaexchange@hq.doe.gov

ISO 9001: 2008 STANDARDS: SMALL CHANGE BIG PAYOUT

BY JOHN E. "JACK" WEST (QP, APRIL 2009) *Rewritten by Venetia Livingston, PEC*

A recent update by ISO to the 9000 series, specifically to the 9001 family of standards *Quality Management Systems-Requirements*, occurred on November 15, 2008. According to Mr. John West, author of the article *Small Change Big Payoff*,¹ the changes made within the new ISO 9001 version, ISO 9001: 2008, are relatively minor for organizations that are already ISO compliant. However, these organizations can use this as an opportunity "to review their quality management system and upgrade where it's needed." According to Mr. West, revisiting an organization's QMS has the potential to boost overall productivity.

For roughly the past thirty years, the International Standardization Organization (ISO) 9000 standards have been the metric by which organizations develop their quality assurance programs. The 9000 "family of Standards was developed to assist organizations, of all types and sizes, to implement and operate an effective quality management system (QMS)." The QMS approach to management strives to "...encourage...organizations to analyze customer requirements, define the processes that contribute to the provision of a product that meets the specified requirements, and to keep these processes under control." ISO maintains and consistently re-develops its existing standards such that the "requirements for quality motivate change."

In Mr. West's article, he notes some areas in the ISO 9001: 2008 that have been changed from the previous version, ISO 9001: 2001:

- **Legal Requirements:** To maintain consistency throughout the entire document, when referring to legal requirements, instead of using the word "regulatory" the ISO 9001: 2008 uses the phrase "statutory and regulatory."
- **Outsourcing:** In the ISO 9001: 2008 version, more detail is used to describe the outsourced process and the internal control required to maintain this process.
- **Competence:** ISO 9001: 2008 provides clarification on the specifics of the level of competency needed to perform ISO training as well as to achieve ISO certification. In previous versions, there were misconceptions regarding competency requirements.

- **Design and Development:** The ISO 9001: 2008 distinguishes the purposes of design and development review, verification and validation. These processes "have distinct purposes but may be conducted and recorded separately or in any suitable combination."
- **Control of Monitoring and Measuring Equipment:** ISO 9001:2008 gives users more clarity in the language by being more specific in its definition of the word "devices" and its uses when refereeing to measuring apparatus. "ISO 9001: 2008 changes measurement "devices" to measuring "equipment."
- **Internal Audits:** In ISO 9001: 2008, users are provided explanations of the nuances in performing an audit like the types of corrective actions that should be undertaken in the face of a violation and provisions that should be made when performing such audits.
- **Monitoring and measurements process:** Unlike its predecessor, ISO 9001: 2008 provides more clarity about the appropriate level of scrutiny an organization should conduct when monitoring and measuring QMS processes.
- **Control of nonconforming products:** The ISO 9001: 2008 provides clarity about nonconforming products which is more appropriate for service oriented organizations.

ISO has developed useful support packages that can help organizations implement the changes found in ISO 9001: 2008. For example, at the ISO TC/176/SC2 website, ISO 9000 users are provided with information from the ISO technical committee and subcommittee that develop and revamp the ISO 9000 series of standards. This site also provides brief instruction on properly implementing the new provisions in ISO 9001 standards.

Finally, as an organization begins to review their QMS and implement the new changes, it is important to recognize that there are certain characteristics found in organizations that are able to effectively accomplish this task. Some of these characteristics include:

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- Obtaining top management support in the review of the QMS;
- Maintaining a consistent strategy of improvement for the overall good of the organization;
- Maintaining up-to-date data on improvement processes. With the proper documentation available, changes to the QMS are easily accepted by upper management;
- Developing and maintaining a corrective action process that emphasis making improvements to the QMS and achieving the organization’s goals;
- Development of organizational strategies that answer potential “what if there are changes to the QMS” scenarios;
- Development of an internal audit system that identifies the external users experience and improves the users satisfaction with going forward; and
- Striving to develop an improved QMS that is both simple and easy for everyone to understand.



**The World’s Most Popular Standard
Evolves to Meet Future Needs**

Organizations should see the newest revision to the ISO 9001 as an opportunity. With this newest update to the quality assurance standards, organizations have a new incentive to perform an informative review of their QMS and in the end improve areas in their quality assurance program that were once poor.

¹This article was taken from *Quality Progress*, April 2009. Permission was granted to rewrite and publish this article.

John E. “JACK” West is co-author of six books published by ASQ Quality Press. The latest is the newly updated and expanded ISO 9001: 2008 Explained (ASQ Quality Press, 2009). West, an ASQ fellow, is board chairman of Silver Fox Advisors, a Houston-based organization of executive mentors, management consultants and business advisors. He is past chair of the U.S. technical advisory group to ISO TC 176 and lead delegate to the committee responsible for the ISO 9000 family of quality management standards.

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HAS YOUR CONTACT INFORMATION CHANGED?

If so, please help us maintain the QA Point of Contact database with accurate information by forwarding the following information to: gaexchange@hq.doe.gov.

- Name
- Phone number
- E-mail address
- Federal or Contractor personnel
- DOE organization or company name
- and site name, if applicable

SPECIAL FEATURE: QUALITY ASSURANCE HELPS DELIVER TWO MILLION LINES OF CODE FOR THE NATIONAL IGNITION FACILITY CONTROL SYSTEM*

Completed on schedule in March 2009 within budgeted cost of \$3.54B, the National Ignition Facility (NIF) is the world's largest laser system, housed in a ten-story building the size of three football fields at Lawrence Livermore National Laboratory. Experiments using NIF's 192 laser beams will make significant contributions to national and global security, could lead to practical fusion energy, and will help the nation maintain its leadership in basic science and technology. When inertial confinement fusion (ICF) ignition experiments begin in 2010, NIF will focus up to 1.8 million joules of ultraviolet laser energy on a tiny target in the center of its ten-meter-diameter target chamber – creating conditions similar to those that exist in the cores of stars and inside nuclear weapons.



Aligning and timing NIF's giant laser beams to simultaneously hit a target the size of a pea is roughly like hitting the strike zone with a baseball from 350 miles away. The linchpin that makes NIF operations and experiments possible is the facility's Integrated Computer Control System (ICCS), among the most complex automated control systems ever designed for a scientific machine. With about two million lines of code running on more than 1,300 computers, ICCS operates laser hardware containing 60,000 control and diagnostic points to ensure that all of NIF's laser beams arrive at the target within a few tens of picoseconds of each other and that a host of diagnostic instruments record data in a few billionths of a second.

ICCS uses an innovative architecture that allows each of the 24 bundles of eight laser beams to be aligned and prepared for a shot independently. With this modular approach, scientists can design experiments so individual bundles have different energy and waveform

characteristics. ICCS fires the laser and conducts these experiments automatically by directing the actions of hundreds of computers controlling NIF through a complex script that calculates the required configuration of the laser beams, aligns them on target, fires the laser and collects the data. NIF is thus an unusually flexible user facility that will provide scientists with the wide experimental regime they need in the decades ahead.

Reliability of the control system software is essential to NIF's operation. Twenty-four hours a day, the control system supervises shot setup and countdown; oversees machine interlocks to protect hardware, data, and personnel; provides operators with graphical interfaces for control and status; performs automatic beam alignment; controls power conditioning and electro-optic subsystems; operates target diagnostics for recording X-ray, optical and nuclear phenomena; and monitors the health of all subsystems and components.

Software Project Management Key to Quality

A team of about 100 software developers, engineers and quality control experts designed a flexible control system solution whose pieces operate individually but, at the time directed, work in unison. Success was keyed to early adoption of software project management and engineering methodologies such as an incremental development lifecycle, an architecture that reduced complexity, and code frameworks to realize recurring design patterns. From the project outset in 1996, ICCS reliability has been enhanced under the guidance of a software quality assurance plan (SQAP). Using a graded approach, the SQAP maintains quality over the long lifecycle by emphasizing the importance of requirements management, change control, source code configuration, unit testing, offline product integration and independent verification testing.

ICCS managers planned team resources using the Constructive Cost Model (COCOMO II) estimating tool. COCOMO applies project attributes for complexity, code size, schedule and experience to predict resources needed to deliver quality code. Measurements of interim software releases were extrapolated to determine ICCS code size at completion. The plan was reviewed periodically to incorporate current data. Resources were allocated to maintain skills in software development, quality

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engineering, systems engineering, database engineering and configuration management. Throughout the project about 30% of the total effort was assigned to perform independent quality control and assurance activities.

Development Lifecycle Adapts to Evolving Requirements

One area that challenged system designers was early specification of software requirements. The control system had many detailed requirements that were not initially known. ICCS managers selected an incremental software development strategy that delivered increments of new functionality sufficient to support user needs while also allowing additional requirements to be discovered, planned and implemented. Software development is managed through a formal software change request (SCR) process overseen by a change control board. SCRs are documented in an issue tracking database. The tracking tool records data for enhancements and problems such as priority, status, subsystems affected, and effort expended. This tool is used at every stage of the lifecycle to monitor the work and its quality level.

Configuration management (CM) is essential to ensure the product set is up-to-date, contains planned features and is built consistently from source code without errors. A dedicated CM Team maintains the configuration and installs all [code] releases. These specialists assure the integrity of the code while coordinating simultaneous releases and multiple target environments for development, offline quality control testing, or online deployment.

Investment in Testing Assures Reliability

Early in the project, ICCS established a 2,200ft² Integration and Test Facility (ITF) to support quality control offline, well before the software was delivered for use. The ITF contains computer resources dedicated to testing such as servers, operator workstations, network equipment and controllers, along with many examples of real hardware devices used in the laser. Software releases undergo two separate offline test cycles in the ITF and an online test to verify correct operation of manual device controls, automatic controls, and execution of scripted target shots. All software defects identified during offline and online testing are documented in the issue tracking database.

At the end of each coding cycle, and after unit testing is complete, the Development Team integrates the software components and tests the combined software in the ITF. This first offline test exercises simulated system operations in a strictly configuration-managed environment to verify new functionality works as intended. Many control points are modeled by software emulators to allow testing at large scale that closely mimics actual device behavior. For critical requirements, regression tests are performed to confirm that no defects have been introduced into unintended parts of the software.

A second, more formal offline test is designed and conducted by the Test Team, whose personnel are independent of development. The formal test verifies functional, interface and performance requirements. Both normal and off-normal test cases are conducted. Off-normal tests are used to inject fault conditions that verify the software's ability to detect and robustly handle error conditions. Operators receive training in the ITF on new features and bug fixes, and then help validate that the software and operating procedures meet expectations. After completing offline tests, the software is scheduled for online deployment. Operations personnel that are

qualified to run laser shots conduct the online test with Test Team support.

ICCS quality is monitored to identify opportunities for process improvement. Metrics are needed to answer questions



such as: How reliable is the control system? Which subsystems and components are the major contributors to unreliability, and should therefore receive the most QA focus? Which process improvements would result in the biggest quality gains? These questions help define the data needed, which includes measures of reliability, system availability and defect density.

QA metrics are collected from the issue tracking database and code management system. To date, over 31,000 SCRs have been processed. Approximately equal percentages were filed to address code problems, to authorize planned implementation, and to request new enhancements.

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Software production has reached over 200,000 lines of code per year, which generally agrees with estimates. The data shows that typically 75% of software defects are found offline, 15% are found during online testing, and the remaining 10% are found during subsequent operations.

In one process improvement example, ICCS quality metrics showed many defects could be found earlier during development if code inspections were performed by another developer. Inspection precedes testing and aims to ensure specific code changes are correct, unit testing was performed, documentation is complete and configuration management rules were followed. Standardized coding practices guide these reviews to help achieve consistent and more maintainable code. Based on the measured benefit, inspections initially practiced on a sampling basis were expanded to include 100% of all code written.

NIF Begins the Quest for Fusion Ignition

Rigorous software engineering practices helped deliver the NIF project on time while assuring high reliability. A distributed architecture was chosen to reduce complexity and risk, which realized the benefits of lower cost, consistent performance and improved maintainability. Quality assurance initiated early in the project emphasized configuration management, offline integration testing, and independent verification to successfully meet customer expectations. Metrics gathered during the software lifecycle continue to help assess quality and guide improvements. Over two million lines of code have been deployed and used to conduct routine shot operations. Software QA at NIF is very effective, consistently finding most major defects and better than 90% of all software defects before the software was used.



NIF has entered the first phase of operations during which the National Ignition Campaign (NIC) is incorporating additional capabilities for target diagnostics, experiment analyses, tritium fuel and cryogenic targets. Experiments for achieving fusion ignition are expected to start in late 2010. The scientific understanding obtained on NIF will advance high energy density physics research, and may also lead to a virtually unlimited, carbon-free energy source for the nation. Quality assurance will continue to play a critical role as NIF performs its scientific research mission and is enhanced with new capabilities over its planned 30-year lifetime.

This article was written and submitted by Paul J. Van Arsdall, Associate Project Manager, NIF, LLNL

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EFCOG ISM & QA SEMI-ANNUAL MEETING DISCUSS QA-RELATED ISSUES IN MULTIPLE TRACKS

The Energy Facility Contractors Group (EFCOG) held its Integrated Safety Management (ISM) & Quality Assurance Working Group Semi-Annual Meeting May 5 through 7, 2009 at the Oak Ridge National Laboratories Conference Center in Oak Ridge, TN. HSS made several presentations.

The Semi-Annual meeting explored a number of issues related to QA in multiple tracks. Three of the many issues identified were:

- Vendor audits - The EFCOG Supply Chain Working Group is trying to get more contractors involved to increase the number of vendor evaluations that can be done. It is believed that combined audits will reduce duplicative audits of the suppliers. However one issue that complicates the audits is inconsistent requirements for auditor qualifications.
- Feedback and Improvement – Capturing and communicating lessons learned were discussed in several sessions. In particular, the volume of lessons learned information makes it difficult for users to absorb. Key words, sorting, and alerts triggered by key words were mentioned as means to enhance the delivery of information to interested parties. Several people indicated that they like the Quality Assurance Newsletter as a means of communicating information to the QA community.
- Commercial Grade Dedication – In general, commercial grade dedication (CGD) is not considered a process of choice. It is used by DOE contractors when a qualified vendor is not available. The Nuclear Regulatory Commission (NRC) has better documentation than DOE on the expectations for CGD in 10 CFR Part 21 and related guidance. DOE relies on the CGD requirements in NQA-1 and other non-government standards, and does not address it in the QA requirements in 10 CFR 830 or in DOE O 414.1C. Some DOE contractors have been qualifying all subparts of safety structures, systems, and components as safety, requiring CGD of all subparts; however not all subparts provide safety functions.

Other presentations that were well-attended included the software quality assurance session provided by Debra Sparkman (DOE-EM), and the training session (multiple presenters), which included a discussion on the need to effectively standardize basic training throughout the complex (e.g. Radiation Worker 1 and General Employee Training) in order to accommodate the need for large numbers of trained workforce to perform work funded by the government American Recovery and Reinvestment Act (ARRA) efforts.

*This article was written and submitted by Mary Haughey, HSS-DOE.
For more information, please contact: Mary.Haughey@hq.doe.gov*

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QUALITY ASSURANCE REQUIREMENTS FOR RESPIRATORS: NOTICE OF PROPOSED RULEMAKING

The Department of Health and Human Services (HHS) proposes to update existing quality assurance requirements under 42 CFR Part 84 for the manufacture of all respirators approved by the National Institute for Occupational Safety and Health (NIOSH). The proposed rule would incorporate into Part 84 the ISO Q9001-2000 standard: Quality Management Systems - Requirements, 3rd Edition, established by the International Organization for Standardization (ISO). It would also update technical requirements particular to quality assurance for manufacturing of NIOSH-approved respirators, and would establish requirements governing the related quality assurance oversight activities of NIOSH.

The ISO standard requires the use of a clearly specified, comprehensive, systematic, quality management system, and provides specific parameters for quality management system documentation, management responsibilities, resource management, product realization, and measurement, analysis and quality management improvement.

The proposed rule would also update the existing requirements governing the inspection sampling plans used by respirator manufacturers, and would enable manufacturers to establish product inspection approaches suited to their quality management systems.

The proposed rule was posted in the Federal Register and can be found online at [Regulations.gov](http://www.regulations.gov).

Please note that on May 21, 2009, NIOSH extended the comment deadline to October 9, 2009. Any person wishing to make comments on the proposed rule is asked to forward their comments to Dan Marsick, Office of Worker Safety and Health Policy, HS-11, at dan.marsick@eh.doe.gov. Mr. Marsick can be reached at 301-903-3954.

This article was written and submitted by Mark Petts, HSS-DOE. For more information, please contact: Mark.Petts@hq.doe.gov

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OPERATING EXPERIENCE COMMITTEE SPRING WORKSHOP: SHARING IDEAS FOR LESSONS LEARNED DATABASE

An Operating Experience Committee Spring workshop was held in Carlsbad, NM, April 28 – 29, 2009. DOE and DOE contractor employees shared information on the lessons learned programs at DOE sites and formed subgroups to discuss subjects such as improving the lessons learned database and clarifying the attributes of good lessons learned reports. A “Tools and Resources” subgroup worked on formulating recommendations to enhance the current lessons learned database in order to make it easier to use and understand, and to provide more support to users who are submitting lessons. Other suggested changes to the lessons learned database included improved search methods and revision or elimination of the key word search terms.

This article was written and submitted by Mark Petts, DOE-HSS.

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HSS QA ACTIVITY CORNER

DOE Quality Council

The DOE Quality Council (Council) currently has representatives from 18 DOE HQ and Field Offices. The overall purpose of the Council is to promote improved communication, consistency, and collaboration of quality assurance (QA) across DOE. The Council has been meeting via conference calls on a monthly basis since August 2008.

The major initiatives the Council is undertaking include preparing QA training for HQ personnel, developing a template for QA and Integrated Safety Management (ISM) requirement integration, establishing guidance for implementing NQA-1 Part II requirements, and updating the Survey on QA Implementation for issuance across the Department.

Two face-to-face meetings are scheduled in the near term. The ISM Champions Conference, to be held August 24, 2009, in Knoxville, TN, will have a mini meeting of the Quality Council. Several council members will be presenting papers on some of the Quality Council initiatives. On November 3–5, 2009, a full council meeting will be held in Germantown, MD. To see the Council Charter visit <http://www.hss.energy.gov/nuclearsafety/qa/council>.

DOE O 414.IX (QA Order) Update Status

A team of HQ, Field, and Contractor representatives were assembled and began reviewing the QA Order in June 2008. Several revisions of the Order were drafted based on team member input. A full Peer Review was performed on the latest draft in May 2009, and 344+ comments were received and dispositioned. The team is currently entering the Red Team review phase of the effort. The Red Team is composed of representatives from major HQ offices. These officials are responsible to review the team deliverables for readiness to proceed to the Directives Review Board, who will give the OK for the Order to enter into the RevCom phase. It is estimated that the RevCom process for this Order may begin as early as October 2009. Stay tuned!!

2009 Survey on QA Implementation

The Survey has been developed and finalized by Quality Council members from HSS, ID, BNL, RL, ORP, NNSA, and SC. The Survey was divided into two Surveys to account for Program Office and Staff/Support Office differences. Each Survey was tailored to address these differences and to help request appropriate and relevant information. Once each Survey's transmittal memorandum is signed by the Deputy Secretary, the requests will be distributed to each Office. The purpose of the Survey is to assess the status of QA implementation in DOE and help highlight potential improvement areas. The Surveys are to be completed every two years.

U.S. Department of Energy

Office of Nuclear Safety, Quality
Assurance and Environment (HS-20)

Office of Quality Assurance Policy
and Assistance (HS-23)

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EDITORIAL NOTE:

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We're on the Web!

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hss.energy.gov/csa/csp/qa/

QA-RELATED MEETINGS & CONFERENCES**2009 DOE Integrated Safety Management Conference**

When: August 24–27, 2009

Where: Knoxville Convention Center in Knoxville, Tennessee

For more information: <http://ism.y12.doe.gov/>

National Personal Protective Technology Laboratory NIOSH Public Meeting

When: September 17, 2009

Where: Pittsburg, PA

For more information: www.cdc.gov/niosh/npptl/resources/pressrel/letters/

Click [here](#) to register

36th National Energy and Environment Conference

When: October 11–14, 2009

Where: Orlando, Florida

For more information: www.asq.org/ee/interaction/conferences-ee.htm

ASME NQA-1 Committee Meeting

When: October 26–29, 2009

Where: Denver, Colorado

For more information: <http://calendar.asme.org/home.cfm?EventTypeID=4>

Global Regulatory Compliance Challenges: A symposium sponsored by the Regulatory Forum of the Society of Quality Assurance

When: Oct. 26-27, 2009

Where: Philadelphia, PA

For more information: www.sqa.org/newsite/public/meeting-oct09-globalreg.asp

Quality Council Meeting

When: November 3–5, 2009

Where: Germantown, Maryland

For more information: www.hss.energy.gov/nuclearsafety/qa/council

EFCOG ISM & QA Working Group Semi-Annual Meeting

When: November 3–5, 2009

Where: Las Vegas, Nevada

For more information: <http://www.efcog.org/>

Office of Quality Assurance Policy and Assistance (HS-23)

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